

CLAIMS:

1. Medicament cartridge for use in an inhalation device comprising a carrier having a plurality of medicament retainers in a spiral path arrangement.
2. Medicament cartridge according to Claim 1, wherein said carrier is substantially planar.
3. Medicament cartridge according to Claim 2, wherein said carrier is substantially rigid.
4. Medicament cartridge according to Claim 3, wherein said carrier is circular in shape and is rotationally mountable.
5. Medicament cartridge according to any of Claims 1 to 4, wherein each medicament retainer comprises a pocket.
6. Medicament cartridge according to Claim 5, wherein a seal is provided to each pocket.
7. Medicament cartridge according to Claim 6, wherein said seal comprises a sealing tape arranged along said spiral path and wherein each pocket is accessible by progressive removal of the tape from the spiral path.
8. Medicament cartridge according to any of Claims 1 to 4, wherein each medicament retainer comprises a hole in the carrier.
9. Medicament cartridge according to Claim 8, wherein each hole is provided with a mesh for retention of medicament.

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5 10. Medicament cartridge according to Claim 1 wherein said carrier is elongate, storable in a flat spiral configuration and extendable as a helix.

10 11. Medicament cartridge according to Claim 10, wherein said medicament retainers are serially arranged along the elongate carrier.

15 12. Medicament cartridge according to either of Claims 10 or 11, wherein each medicament retainer comprises a cavity in the elongate carrier.

20 13. Medicament cartridge according to Claim 12, wherein a seal is provided to each cavity.

25 14. Medicament cartridge according to Claim 13, wherein said seal comprises a sealing tape and each cavity is individually accessible by peelable removal of the sealing tape.

30 15. Medicament cartridge according to any of Claims 1 to 14, wherein each medicament retainer is sized to retain a single dose of medicament.

16. Medicament cartridge according to claim 15, having from 60 to 500, preferably from 100 to 300, medicament retainers.

17. Medicament cartridge according to Claim 16, wherein said medicament dose is applied to the carrier by wet or dry printing methods.

18. Medicament cartridge according to Claim 17, wherein medicament is present in one or more of the medicament retainers.

5 19. Medicament cartridge for use in an inhalation device comprising a carrier having a plurality of medicament doses thereon, wherein said doses are in a spiral path arrangement.

10 20. Medicament cartridge for use in an inhalation device comprising an elongate carrier having a plurality of medicament doses thereon, wherein said elongate carrier is storable in a flat spiral configuration and extendable as a helix.

15 21. Inhalation device comprising

a housing having an air inlet, an air outlet and an airway therebetween;

a medicament carrier having a plurality of medicament retainers in a spiral path arrangement; and

20 a mover for moving the medicament carrier relative to the housing so as to bring successive medicament retainers individually into communication with the airway.

25 22. Inhalation device according to Claim 21, wherein said medicament carrier is a substantially rigid circular disk which is rotatable relative to the housing.

30 23. Inhalation device according to Claim 22, wherein the circumference of said disk is provided with teeth and said teeth engage a worm drive for drivable rotation of said disk.

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24. Inhalation device according to either of Claims 22 or 23, wherein each medicament retainer comprises a ~~pocket~~ in a first face of the disk.

5 25. Inhalation device according to Claim 24, wherein the second face of the disk has a spiral track for receipt of a tracking pin fixedly mounted on the housing such that as the disk rotates relative to the housing the tracking pin moves along the spiral track and the disk moves translationally relative to the housing.

10 26. Inhalation device comprising
a housing having an air inlet, an air outlet and an airway therebetween;
a medicament carrier having a plurality of medicament retainers in a spiral path arrangement, each medicament retainer having a seal;
15 an actuator for progressively unsealing each medicament retainer on the spiral path.

20 27. Inhalation device according to Claim 26, additionally comprising a
a mover for moving the medicament carrier relative to the housing so as to bring successive medicament retainers individually into communication with the airway.

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28. Inhalation device according to either of Claims 26 or 27, wherein each medicament retainer comprises a ~~pocket~~.

29. Inhalation device according to Claim 28, wherein said seal comprises a sealing tape arranged along said spiral path and wherein each pocket is serially accessible by peelable removal of the tape.

30. Inhalation device according to Claim 29, wherein an end of said sealing tape connects to said actuator and peelable removal of the sealing tape is achievable by movement of the actuator.

31. Inhalation device according to Claim 30, wherein said actuator is rotatable relative to the housing such that rotation of the actuator results in coiling of the tape around the actuator.

32. Inhalation device according to Claim 31, wherein the actuator is an axially mounted tapered pole.

33. Inhalation device comprising

a housing having an air inlet, an air outlet and an airway therebetween;

an elongate carrier having a plurality of medicament retainers, wherein said elongate carrier is storable in a flat spiral configuration; and

a mover in communication with the elongate carrier for helically extending the elongate carrier such as to successively move each medicament retainer to an access position.

34. Inhalation device according to Claim 33, wherein each medicament retainer comprises a cavity in the elongate carrier.

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35. Inhalation device according to Claim 34, wherein each medicament retainer has a seal, the device additionally comprising

an actuator for unsealing a medicament retainer at the access position.

36. Inhalation device according to Claim 35, wherein said seal comprises a sealing tape arranged along the elongate carrier and wherein each successive cavity is accessible by peelable removal of the tape from the elongate carrier.

37. Inhalation device according to Claim 36, wherein an end of said sealing tape connects to said actuator and peelable removal of the sealing tape is achievable by movement of the actuator relative to the elongate carrier.

38. Inhalation device according to Claim 37, wherein said mover is rotatable relative to the housing such that rotation of the mover results in coiling of the elongate carrier around the mover, and wherein said actuator is rotatable relative to the housing such that rotation of the actuator results in coiling of the tape around the actuator.

39. Inhalation device according to Claim 38, wherein the mover is an axially mounted tapered pole and the actuator is also an axially mounted tapered pole.

40. Inhalation device according to any of Claims 26 - 28 or 35 wherein said actuator comprises a piercer for piercably unsealing a medicament retainer.

41. Inhalation device comprising

a housing having an air inlet, an air outlet and an airway therebetween;

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a mover in communication with the elongate carrier for helically extending the elongate carrier such as to serially move each dose to an access position.

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43. Use of an inhalation device according to any of Claims 21 to 42 for the administration of medicament to a patient.